The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1 - 3.   (Cancelled)

4.   (Currently Amended) The method as recited in <u>claim 39</u> <s>claim 1</s>, wherein each of [[the]] <u>a</u> plurality of horizontal segments <u>of the scroll bar</u> [[is]] <u>are</u> displayed with at least one of a color, hue, intensity and transparency indicating its relative importance.

5.   (Currently Amended) The method as recited in <u>claim 39</u> <s>claim 1</s>, <u>further comprising:</u> <s>wherein</s> displaying the scroll bar <s>further comprises</s> <u>by</u> applying a background display criteria to a plurality of locations of the scroll bar corresponding to remaining locations in the file that do not include the desired locations.

6.   (Original)   The method as recited in claim 5, further comprising:
           displaying one or more of the plurality of locations in the file by applying the display criteria and the background display criteria.

7.   (Cancelled)

8.   (Currently Amended) The method as recited in <u>claim 39</u> <s>claim 1</s>, further comprising:
           displaying one or more of the plurality of locations in the file by applying the display criteria.

9 - 10. (Cancelled)

11.   (Currently Amended) The method as recited in <u>claim 39</u> <s>claim 1</s>, wherein the location criteria is used to identify one or more errors.

12.   (Currently Amended) The method as recited in <u>claim 39</u> <s>claim 1</s>, wherein the location criteria is used to identify one or more warnings.

13.   (Currently Amended) The method as recited in <u>claim 39</u> ~~claim 1~~, further comprising:
        obtaining one or more user-defined location criteria.

14.   (Original)   The method as recited in claim 13, further comprising:
        obtaining one or more user-defined display criteria.

15.   (Currently Amended) The method as recited in <u>claim 39</u> ~~claim 1~~, wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria.

16-22. (Cancelled)

23.   (Currently Amended) The method as recited in <u>claim 39</u> ~~claim 1~~, wherein each of the one or more display criteria is associated with one or more of the location criteria.

24.   (Original)   The method as recited in claim 5, further comprising:
        obtaining user-defined background display criteria.

25.   (Original)   The method as recited in claim 24, wherein the background display criteria includes at least one of color, hue, intensity and transparency.

26.   (Original)   The method as recited in claim 5, wherein the background display criteria includes at least one of color, hue, intensity and transparency.

27.   (Original)   The method as recited in <u>claim 39</u> ~~claim 1~~, wherein locating one or more desired locations in the file according to the location criteria comprises:
        determining a reference count for each row in the file, the reference count indicating a number of the desired locations in the corresponding row.

28.   (Original)   The method as recited in claim 27, wherein displaying the scroll bar by applying the one or more display criteria to one or more locations of the scroll bar corresponding to the one or more desired locations in the file comprises:
        applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the reference count for corresponding rows in the file.

29. (Original)   The method as recited in claim 28, further comprising:

displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the reference count for corresponding rows in the file.

30. (Original)   The method as recited in claim 28, further comprising:

dividing the reference count for each row in the file by a total number of reference counts in the file to obtain a row reference count;

normalizing the row reference count for each row in the file;

wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the normalized row reference count for corresponding rows in the file.

31. (Original)   The method as recited in claim 30, further comprising:

displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the normalized row reference count for corresponding rows in the file.

32. (Original)   The method as recited in claim 30, further comprising:

applying a non-linear function to each normalized row reference count to generate a non-linear normalized row reference count for each row in the file;

wherein applying the one or more display criteria to the one or more locations of the scroll bar includes applying the one or more display criteria to the one or more locations of the scroll bar in accordance with the non-linear normalized row reference count for corresponding rows in the file.

33. (Original)   The method as recited in claim 32, further comprising:

displaying one or more of the plurality of locations in the file by applying the one or more display criteria to the one or more of the plurality of locations in the file in accordance with the non-linear normalized row reference count for corresponding rows in the file.

34. (Original)   The method as recited in claim 32, wherein the non-linear function is a square-root function.

35-37. (Cancelled)

38.   (Currently Amended) The method as recited in <u>claim 39</u> ~~claim 1~~, further comprising:
receiving a selection of a location of the scroll bar after the scroll bar is displayed.

39.   (New) In a computing system, a method of using a scroll bar appearance to directly display file information, the method comprising:
obtaining one or more location criteria to identify a plurality of desired locations in the file;
identifying one or more scroll bar display criteria for changing the appearance of the scroll bar to designate the plurality of desired locations in the file, wherein the change of appearance of the scroll bar is based upon a relative importance of the desired locations with respect to each other;
locating the plurality of desired locations in the file according to the one or more location criteria;
determining the relative importance of each one of the plurality of desired locations in the file with respect to each other; and
changing the appearance of the scroll bar as the scroll bar is moved relative to the file, wherein the change in appearance of the scroll bar is based upon the determined relative importance of the desired locations in the file corresponding to a current position of the scroll bar.

40. (New)   A computer readable storage medium storing at least executable computer code for using a scroll bar appearance to directly display file information, wherein the computer readable storage medium comprises:
executable computer code for obtaining one or more location criteria to identify a plurality of desired locations in the file;
executable computer code for identifying one or more scroll bar display criteria for changing the appearance of the scroll bar to designate the plurality of desired locations in the file, wherein the change of appearance of the scroll bar is based upon a relative importance of the desired locations with respect to each other;
executable computer code for locating the plurality of desired locations in the file according to the one or more location criteria;

executable computer code for determining the relative importance of each one of the plurality of desired locations in the file with respect to each other; and

executable computer code for changing the appearance of the scroll bar as the scroll bar is moved relative to the file, wherein the change in appearance of the scroll bar is based upon the determined relative importance of the desired locations in the file corresponding to a current position of the scroll bar.

41. (New)   The computer readable storage medium of claim 40, wherein the computer readable storage medium further includes:

executable computer code for obtaining one or more user-defined display criteria.

42. (New)   The computer readable storage medium of claim 40, wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria.

43. (New)   The computer readable storage medium of claim 40, wherein each of the one or more display criteria includes at least one of color, hue, intensity and transparency.

44. (New)   A computer system for using a scroll bar appearance to directly display file information, wherein the computer system is operable to:

obtain one or more location criteria to identify a plurality of desired locations in the file;

identify one or more scroll bar display criteria for changing the appearance of the scroll bar to designate the plurality of desired locations in the file, wherein the change of appearance of the scroll bar is based upon a relative importance of the desired locations with respect to each other;

locate the plurality of desired locations in the file according to the one or more location criteria;

determine the relative importance of each one of the plurality of desired locations in the file with respect to each other; and

change the appearance of the scroll bar as the scroll bar is moved relative to the file, wherein the change in appearance of the scroll bar is based upon the determined relative importance of the desired locations in the file corresponding to a current position of the scroll bar.

45. (New)   In a computer system, a method of displaying a vertical scroll bar for a file, the method comprising:

obtaining one or more location criteria to identify a plurality of desired rows in the file as a plurality of desired locations in the file;

identifying one or more display criteria to be used to designate the plurality of desired locations in the file to display their relative importance with respect to each other;

locating the plurality of desired locations in the file according to the one or more location criteria;

determining relative importance of each one of the plurality of desired locations in the file with respect to each other; and

displaying the vertical scroll bar with at least a portion of content of the file and in proximity of an edge of the displayed portion of the content, wherein the vertical scroll bar is operable to scroll the file and indicate the relative size of the displayed portion of the content with respect to the size of the entire document, wherein the displaying of the vertical scroll bar displays the vertical scroll bar, based on the relative importance, by applying the one or more display criteria to each one of a plurality of corresponding locations of the vertical scroll bar corresponding to the plurality of desired locations in the file individually, wherein said displaying of the scroll bar also displays each one of the plurality of corresponding locations of the scroll bar to indicate the relative importance of content in each one of the plurality of desired locations in the file with respect to one another even though the content of the plurality of desired locations of the file are not displayed, and wherein the scroll bar includes:

a plurality of horizontal segments, each of the horizontal segments indicating relative importance of contents in the corresponding locations of the file, and wherein the plurality of horizontal segments are displayed at least partially based on one or more granule objects, wherein each one of the one or more granule objects is representative of one of the desired rows of the displayed content, and wherein each granule object stores at least: (a) a reference count indicative of the relative importance of its respective row and (b) text of its respective row; and

displaying at least a portion of the file by applying at least one of the display criteria when the scroll bar is being displayed.

46. (New)   The computing system of claim 44, wherein the computing system is further operable to obtain one or more user-defined display criteria.

47. (New)   The computing system of claim 44, wherein the location criteria includes one or more rankings associated with one or more content-dependent criteria.

48. (New)   The computing system of claim 44, wherein each of the one or more display criteria includes at least one of color, hue, intensity and transparency.